

REMARKS

Claims 1-26 were examined in the outstanding final office action mailed on 02/11/2008 (hereafter "First Final Office Action"). The specification was objected to and all the claims were rejected.

5 By virtue of this paper, the specification and claims 1-7, 11-14, 16-17, 20-23 and 25 are sought to be amended and claims 15 and 24 are sought to be canceled. The amendments and cancellations are believed not to introduce new matter and their entry is respectfully requested. Claims 1-14, 16-23 and 25 are thus respectfully presented for reconsideration.

Specification

10 In page 2 paragraph 2 of the First Final Office Action, the specification was objected to as failing to provide proper antecedent basis for the claimed subject matter. In particular, it was alleged that the term "machine readable medium" as claimed in the preamble of claims 11-19 is not defined in the specification.

15 Without acquiescing to any of the Examiner's allegations, it is respectfully noted that the specification is sought to be amended to provide the requested antecedent basis. The amendments are believed not to introduce matter and their entry is respectfully requested. Withdrawal of the objection with respect to the specification is respectfully requested.

Claim Rejections - 35 U.S.C. § 101

20 In paragraphs 3 and 4 of the Outstanding Office Action, the Examiner had indicated that claims 1-10 constitute patentable subject matter under 35 U.S.C. § 101. The Examiner is thanked for the same.

Claim Rejections - 35 U.S.C. § 103

25 Claims 1-4, 11-14, 20-23 were rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki (Patent Number 6,604,170) in view of Nelson *et al* ('Nelson' hereinafter) ('Caching in the Sprite Network File System", ACM Transactions on Computer-Systems, Vol. 6, No. 1, February 1988, pages 134-154).

Without acquiescing to any of the Examiner's contentions it is respectfully submitted that the submitted are allowable over the art of record.

For example, currently amended claim 1 recites that the claimed cluster identifiers respectively identify corresponding clusters on the secondary memory, the FAT (containing the identifiers associated with individual files to indicate the clusters storing the data of the respective files) is stored on the secondary memory and the RAM stores the same information (as in the FAT) as pertinent to a first file when the file is sought to be accessed. Furthermore, all the elements of currently amended claim 1 are performed in a single device.

The Examiner relies on Nelson to teach the claimed storing of the identifiers in a random access memory (RAM). It is respectfully noted that Nelson, either alone or in combination with other references of record, does not teach or reasonably suggest at least the above noted features of currently amended claim 1.

As a basis for such an assertion, Applicants first note that the disclosure of Nelson relied upon by the Examiner relates to a situation in which data is retrieved by a client system via a server. In sharp contrast, currently amended claim 1 relates to performance of all the actions in a single device and also the actions are recited to be performed when the content of the file is to be retrieved.

Furthermore, in accordance with the invention of currently amended claim 1, the cluster identifiers identify the specific clusters (basic units of allocation) in the secondary storage and also the FAT is stored in the secondary storage. The same information as pertinent to an individual file is retrieved and stored in the RAM.

At least the portions of Nelson do not clarify various details such as the specific units of allocation in secondary storage, for the Applicant to clearly address whether the rejection under 35 U.S.C. § 103 would be proper at least as against currently amended claim 1.

In particular, the Examiner's attention is drawn to the disclosure of Nelson stating, "... We used virtual addresses instead of physical disk addresses so that clients could create

new blocks in their caches without first contacting a server to find out their physical locations..." (Page 138, lines 2-4 of Nelson, **Emphasis Added**). This teaching, at least when read alone, appears to impel a skilled practitioner not to combine Suzuki and Nelson as in currently amended claim 1.

5 The burden of coming forward with sufficient information rests with the Patent Office under the applicable laws/practice and it is accordingly submitted that the portions of Nelson relied upon by the Examiner would not establish a proper basis of rejection under 35 U.S.C. § 103.

10 Currently amended claim 1 is accordingly believed to be allowable over the art of record. Claims 2-6 depend from currently amended claim 1, and are allowable at least for reasons noted above with respect to claim 1.

15 Claim 4 is independently allowable at least over the portions relied upon by the Examiner in reciting that the identifiers of the clusters storing the data of the first file are stored in the RAM in the form of an array, permitting each identifier to be accessed in a single access.

The Examiner relies on Col. 6 lines 60-65 of Suzuki in rejecting claim 4 (see Page 6 lines 1-2 of the First Final Office Action). It is respectfully noted that this portion of Suzuki teaches neither an array nor storing the array in a RAM at least based on the below highlighted portion:

20 FIG. 3 shows the ***structure of the directory entry used to record FAT information of each file*** in accordance with the cluster allocation order. This directory entry will be referred to as an EXT-FAT in distinction from the conventional FAT 1302 (FIG. 13). In the EXT-FAT, items corresponding to FAT items will be referred to as EXT-FAT items.

25 The start byte ((00h)-th byte) of the **EXT-FAT records an index in which "1" is** set in bit 7, so as to be distinguished from the two different directory entries shown in FIGS. 4 and 5 to be described later, and to maintain compatibility with the conventional FAT file system. Bytes 0Bh to 0Dh, and 1Ah and 1Bh are used as reserved areas to maintain compatibility with the conventional directory entry structure. The remaining slots record cluster addresses allocated to a given file in the allocation order from a lower cluster address in correspondence with the number of slots. In this embodiment, a cluster address

is expressed by 16 bits (2 bytes). Hence, the EXT-FAT of this embodiment can record FAT information for 13 clusters.
(Col. 6 lines 60-65 of Suzuki, **Emphasis Added**)

5 From the above, it is concluded that the directory entry of Fig. 3 of Suzuki is written on a secondary storage (not a RAM) and thus currently amended claim 4 is independently allowable over the portions relied upon by the Examiner.

10 Currently amended claim 6 is also independently allowable in applying the features to a device which plays songs (likely to have limited memory). In particular, the features are specifically applied to have quick access to data (song portion) in a prior cluster when a rewind operation is to be performed.

15 Currently amended independent claim 7 is also allowable over the art of record in reciting a combination of features including that the identifiers identify the cluster on the secondary storage, and not all the entire FAT is stored in the RAM, but only a portion of the FAT including the specific identifiers identifying clusters of a specific file are stored when the specific file is sought to be accessed.

By storing only a portion of the FAT (including only the required identifiers), the small memory may be efficiently utilized.

20 The portions of Suzuki and Nelson, relied upon by the Examiner, do not teach or reasonably suggest such a combination of features.

For example, equating the storing of "virtual addresses" (see lines 2-5 Page 135 of Nelson) of Nelson with the claimed identifiers would be factually erroneous since the virtual addresses do not identify the clusters in the secondary storage.

25 Similarly, equating the cacheing of 'file maps' (see lines 7-10 page 138 of Nelson) of Nelson with the claimed storing would also be factually erroneous since there is no teaching or suggestion that the file map is cached when a specific file is to be accessed or that only a portion of the file map is cached, even assuming arguendo that the file map of Nelson is akin to the claimed FAT.

At least for some of such reasons, currently amended claim 7 is allowable over the art of record. Claims 8-10 depend from claim 7 and are allowable at least for the reasons noted above with respect to claim 7.

5 The remaining currently amended independent claims 11 and 20 are allowable over the art of record at least for some of the reasons noted above. The dependent claims are allowable at least as depending from the corresponding allowable base claims.

Conclusion

Accordingly all the objections and rejections of record are believed to be overcome.
10 Continuation of examination is respectfully requested. The Examiner is invited to telephone the undersigned representative at 707.356.4172 if it is believed that an interview might be useful for any reason.

Respectfully submitted,

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Signature

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